

**EVALUATING THE VALIDITY OF THE OMNI-ATTRIBUTES OF GOD UTILIZING
AN AUTOENCODED DOMAIN-SPECIFIC LARGE LANGUAGE MODEL AI**

**AI IN THE CHURCH: EXPLORING THE IMPACT OF ARTIFICIAL INTELLIGENCE
ON CHRISTIAN CONGREGATIONS AND SPIRITUAL LEADERSHIP**

A Thesis Prospectus

In STS 4500

Presented to

The Faculty of the

School of Engineering and Applied Science

University of Virginia

In Partial Fulfillment of the Requirements for the Degree

Bachelor of Science in Computer Science

By

Ethan Stokey

December 13, 2024

On my honor as a University student, I have neither given nor received unauthorized aid
on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments.

ADVISORS

Kent Wayland, Department of Engineering and Society

Roseanne Vrugtman, Department of Computer Science

Introduction:

Humanity is plagued with an endless list of problems, but certain entities have positioned themselves as offering the solutions. For the religious, many look to God, as within the Abrahamic faiths. Yet, the evolving presence of artificial intelligence (AI) has emerged as a promising candidate for those seeking solutions. Its generative capabilities are undeniably impressive, but how does it handle the deeper, more thought-provoking questions of existence? The debate over God's existence has long centered on how the ontological qualities of God can coexist with the nature of reality (e.g. the Problem of Evil). Philosophers have yet to establish a conclusive answer on the question of God's existence, and they most likely never will, but nevertheless, AI offers us a powerful new tool for analyzing and evaluating these philosophical arguments. By leveraging its ability to process vast databases filled with the sum of human knowledge, AI can catalog and assess the intricacies of arguments for and against the congruity (or lack thereof) of God's omni-attributes (omnipresence, omniscience, omnipotence, and omnibenevolence) with reality. Its capacity for identifying patterns, inconsistencies, contradictions, and connections across a broad spectrum of data presents an opportunity toward deeper insights into these philosophical inquiries.

Moreover, the role of AI within the religious sphere must be discussed. Viewing AI's advancement within our culture, it's no surprise that its influence is reaching communities of faith, including within the Christian church. There's no end to how it can be used—from the more innocuous searching of Bible verses regarding a certain topic, to the more dubious use of AI-generated sermons delivered to unsuspecting congregants. AI is drastically improving at a rapid pace, but its use in matters of faith and spirituality has not yet been thoroughly examined. Thus, understanding how AI assesses the validity of God's omni-attributes is conducive to how humanity should view the very concept of God, given that few human minds can process such a large body of information as swiftly or comprehensively as AI. The other critical aspect to consider is understanding the impact of AI usage in religious settings by churchgoers, pastors, and theologians. Ultimately, the key questions are “How does AI perceive God,” and “How is AI integrating into the lives of the faithful?”

Technical Research Problem - Evaluating the Validity of the Omni-Attributes of God Utilizing an Autoencoded Domain-Specific Large Language Model AI:

The technical research problem that I will address focuses on how AI can catalog and assess the intricacies of philosophical arguments for and against the congruity of God's omni-attributes—omnipresence, omniscience, omnipotence, and omni-benevolence—with reality. This is important because AI's ability to process and analyze vast amounts of data offers a unique perspective on the age-old debate surrounding the nature and existence of a theistic God. Traditional philosophical inquiry (such as in a personal debate or dialogue), while invaluable, is inherently constrained by human cognitive limits. AI, by contrast, presents an opportunity to systematically analyze these attributes on a scale and depth that would be overwhelming through individual philosophical pursuit.

Existing research demonstrates AI's potential in this realm. For instance, in 2022, Andrea Vestrucci analyzed the testing of AI's interaction with philosophical arguments for God's existence and found that “the use of automated reasoning assistants contributes to the debates on

the incoherency of the concept of God... [to clarify] whether, and how, our concepts of God are compatible with our premises and presuppositions about a divine being, or clash against our expectations..." (Vestrucci, 2022, p. 1014). The AI used to assess the philosophical argument was an automated theorem prover (ATP). In this instance, the AI was qualified to break down the arguments for God's existence, and it even improved its logical construction by getting rid of unnecessary axioms. Therefore, AI has the capability to dispel incompatible assumptions about God's qualities and to simplify the unnecessary components of certain philosophical arguments. In the same year, another philosophical argument for God's existence was put through the same process with multiple ATPs by Christoph Benzmüller. He concluded through its success that "modern symbolic AI technology can thus make a fruitful contribution to the rigorous evaluation of existing arguments and theories in metaphysics and rational theology, and even support the exploration of new, simplified theories" (Benzmüller, 2022, p. 960).

My research will build on existing work in AI's application to philosophical reasoning but extends it by focusing specifically on theological claims about God's omni-attributes. Furthermore, I will not only be using ATPs, but in addition, I will be using AI to catalogue arguments on the subject and to make the arguments into first-order logic that can then be put into the ATPs. To address this problem, the AI will be a Domain-Specific autoencoding Large Language Model, which will specialize in the philosophical domain and understand lexical context and semantics. This model will be fed with an extensive amount of philosophical and theological texts from relevant papers in the databases PhilPapers, the Stanford Encyclopedia of Philosophy, and the Religion and Philosophy Collection. Where applicable, I will attempt to reconstruct any formalized step-by-step philosophical argumentation into first-order logic and simplify its components through the ATPs Prover9, Leo, HOL, and the counterexample generator Nitpick as used in Vestrucci and Benzmüller's analysis (Benzmüller, 2022; Vestrucci, 2022). The AI will then categorize, analyze, and compare various perspectives on God's attributes, both in support and against their correspondence with reality. Some examples of cases that will be considered are the problem of divine hiddenness for an omnipresent God, the problem of egregious suffering for an omnibenevolent God, the paradox of free will for an omniscient God, and the paradox of omnipotence for an omnipotent God. I will then evaluate how AI handles conflicting interpretations, its biases toward specific epistemology, and whether it can provide coherent responses based on logical consistency. This will be done by various inputs, such as challenging it on a certain position, giving it new arguments and tracking its change of opinion, offering incomplete arguments to see if it can fill in its gaps, and many other methods. Throughout this process, my aim will be to understand whether AI can provide insights into the omni-attributes not as easily accessible through traditional methods of inquiry, while assessing the scope of its potential in answering matters of religion.

AI in the Church: Exploring the Impact of Artificial Intelligence on Christian Congregations and Spiritual Leadership:

The STS research problem that I will address is how the integration of AI into Christian congregations influences spiritual practices, discipleship, and theological perspectives, and whether this technology enhances or undermines the authenticity and sacredness of the religious experience. Christianity contains many spiritual disciplines and practices. On the individual level, there is praying, Scriptural study, fasting, and worship. Yet, the church institution is inherently relational as a whole, promoting the personal growth of each individual through the

entirety of the congregation. AI's growing integration into society presents both opportunities to support and risks to disrupt these pursuits.

To illustrate this point, in preparation for scoping AI's potential to have influence in areas pertaining to sexual purity, datafication of the Bible, and spiritual revival, researchers Alexander La Cruz and Fernando Mora wrote that "AI has become an important aspect of our digital society; however, the research about its progressive incorporation into spiritual practices is still in its infancy" (La Cruz & Mora, 2024, p. 4). For many, Christianity forms the foundation of their lives, making it crucial to address the growing integration of AI into this context and bridge existing knowledge gaps. Studies have explored links between spiritual practices, such as prayer, and AI usage; however, their inclusion of both irreligious and religious populations limits their relevance to Christian congregations (Gruchola & Sławek-Czochra & Zieliński, 2024).

In addition, we must inspect the instructive influence that AI has for congregants in terms of personal discipleship and pastoral care. AI is seemingly capable of performing functions that would traditionally fall under the responsibilities of a pastor, including answering doctrinal questions, offering spiritual advice, and even supplementing sermons. It would have "access to [an]... extensive corpus of existing sermons, theological resources, concordances, and scriptural exegeses [that could be mined] for anecdotes, scriptural references, and theological arguments" (William Young, 2019, 492). However, the introduction of this new dynamic brings the possibility of AI substituting genuine, human-led discipleship with algorithmic responses that lack spiritual discernment and relational understanding. A key concern for Professor Young at the time was that "existing systems... [fell] far short of a fully automated pastoral care provider" (William Young, 2019, 495). Yet, as it has been several years since Young's article was published, it would be prudent to investigate the current condition of AI usage in place of human pastoral care, as several "studies [found] that users are often significantly more candid and self-disclosing when conversing with a digital system compared to a human therapist" (William Young, 2019, 494).

Therefore, for this STS research problem, I will analyze the implications of AI within Christian congregations, focusing on its influence over spiritual practices, discipleship, and religious leadership, and one's theological views. This will involve exploring the ways in which pastors and congregants perceive AI's growing influence, as well as how churchgoers are integrating AI into their own faith practices. Through this analysis, I will explore whether AI can positively transform Christian faith practices and leadership or if it poses a threat to the depth and integrity of religious experiences. I will evaluate this by analyzing online social media, blog posts, Christian news and magazine articles. I will also interview religious studies experts and open AI experts on the integration of AI in religious contexts within pastoral care.

Conclusion:

Through my STS research, I aim to investigate how AI integration is shaping spiritual practices, discipleship, and theological views within Christian congregations. By examining how pastors, theologians, and congregants utilize AI, I seek to assess whether it fosters deeper faith and community engagement or risks compromising the personal and relational aspects of religious experiences. This analysis will shed light on the benefits and challenges of incorporating AI into sacred practices, contributing to a nuanced understanding of its role at the

intersection of faith and technology. In my technical research, I will explore how AI can evaluate complex philosophical arguments surrounding God's omni-attributes. Using an autoencoded domain-specific LLM system, I will identify patterns, contradictions, consistencies, and underlying assumptions that might otherwise go unnoticed by a fallible human. This research aims to demonstrate how AI can act as a tool in examining concurrent philosophical debates, providing new perspectives on questions of divine nature and reality. Together, these research projects address how AI is redefining the boundaries of spiritual and philosophical exploration. This work hopes to address a holistic perspective on AI's role in faith-based contexts.

Citations

Benzmüller, C. (2022). Symbolic AI and Gödel's Ontological Argument. *Zygon®*, 57(4), 953–962. <https://doi.org/10.1111/zygo.12830>

Gruchola, M., Sławek-Czochra, M., & Zieliński, R. (2024). Artificial Intelligence as a tool supporting prayer practices. *Religions*, 15(3), 271. <https://doi.org/10.3390/rel15030271>

La Cruz, A., & Mora, F. (2024). Researching artificial intelligence applications in Evangelical and Pentecostal/Charismatic Churches: Purity, Bible, and mission as driving forces. *Religions*, 15(2), 234. <https://doi.org/10.3390/rel15020234>

Vestrucci, A. (2022). Artificial Intelligence and in God's Existence: Connecting Philosophy of Religion and Computation. *Zygon®*, 57(4), 1000–1018. <https://doi.org/10.1111/zygo.12829>

Young, W. (2019). Reverend Robot: Automation and Clergy. *Zygon®*, 54(2), 479–500. <https://doi.org/10.1111/zygo.12515>